



IN THE CLAIMS:

- 1 1. (Currently Amended) A method for ~~reassembling~~ reassembling a packet by a
2 network device, the method comprising the steps of:
3 locating a fragment packet descriptor associated with the packet; and
4 placing the contents of the fragment packet descriptor in a packet descriptor asso-
5 ciated with the packet.
- 1 2. (Original) The method of claim 1 wherein the step of locating a fragment packet
2 descriptor associated with the packet further comprises:
3 locating an entry in a reassembly table associated with the packet; and
4 dereferencing a pointer held in the entry to locate the fragment packet descriptor.
- 1 3. (Original) The method of claim 1 further comprising the steps of:
2 receiving a request to reassemble the packet.
- 1 4. (Original) The method of claim 3 wherein the request comprises:
2 an index to an entry in a reassembly table that is associated with the first fragment
3 of the packet; and
4 a length value that is a count of the total number of entries in the reassembly table
5 that are associated with the packet.
- 1 5. (Original) The method of claim 1 further comprising the step of:
2 deallocating the fragment packet descriptor.
- 1 6. (Original) A computer readable medium that includes computer executable in-
2 structions for performing the method recited in claim 1.

1 7. (Original) An apparatus for reassembling a packet, the apparatus comprising:
2 means for locating a fragment packet descriptor associated with the packet; and
3 means for placing the contents of the fragment packet descriptor in a packet de-
4 scriptor associated with the packet.

1 8. (Original) The apparatus of claim 7 further comprising:
2 means for locating an entry in a reassembly table associated with the packet; and
3 means for dereferencing a pointer held in the entry to locate the fragment packet
4 descriptor.

1 9. (Original) The apparatus of claim 7 further comprising:
2 means for receiving a request to reassemble the packet.

1 10. (Original) The apparatus of claim 7 further comprising:
2 means for deallocating the fragment packet descriptor.

1 11. (Currently Amended) A method for reassembling a packet by a network device,
2 the method comprising the steps of:
3 receiving a plurality of fragments associated with the packet;
4 determining if all the fragments for the packet have been received; and
5 issuing a request to a reassembly assist function if all the fragments for the packet
6 have been received.

1 12. (Original) The method of claim 11 wherein the request comprises:
2 an index to an entry in a reassembly table that is associated with the first fragment
3 of the packet; and
4 a length value that is a count of the total number of entries in the reassembly table
5 that are associated with the packet.

1 13. (Original) The method of claim 11 wherein the step of determining if all frag-
2 ments for the packet have been received further comprising:

3 examining a bit map that indicates whether or not the fragments have been re-
4 ceived.

1 14. (Original) The method of claim 11 further comprising the step of:
2 tracking a fragment of the packet.

1 15. (Original) The method of claim 14 wherein the step of tracking a fragment of the
2 packet further comprising the steps of:

3 keeping a copy of a packet handle associated with the fragment in a reassembly
4 table; and

5 maintaining a location in a bit map that indicates whether or not the fragment has
6 been received.

1 16. (Original) A computer readable medium containing computer executable instruc-
2 tions for performing the method recited in claim 11.

1 17. (Original) An apparatus for reassembling a packet, the apparatus comprising:
2 means for receiving a plurality of fragments associated with the packet;
3 means for determining if all the fragments for the packet have been received; and
4 means for issuing a request to a reassembly assist function if all the fragments for
5 the packet have been received.

1 18. (Original) The apparatus of claim 17 further comprising:
2 means for examining a bit map that indicates whether or not the fragments have
3 been received.

1 19. (Original) The apparatus of claim 17 further comprising:

2 means for tracking a fragment of the packet.

1 20. (Original) The apparatus of claim 19 further comprising:

2 means for keeping a copy of a packet handle associated with the fragment in a
3 reassembly table; and

4 means for maintaining a location in a bit map that indicates whether or not the
5 fragment has been received.

1 21. (Original) A system for reassembling a packet, the system comprising:

2 a processor; and

3 a reassembly assist configured to communicate with the processor;

4 whereby the processor receives a plurality of fragments associated with the packet, de-
5 termines if all the fragments for the packet have been received and issues a request to the
6 reassembly assist to reassemble the packet.

1 22. (Currently Amended) A method for ~~reassembling~~ reassembling a packet, the
2 method comprising the steps of:

3 receiving a fragment packet having a fragment packet descriptor associated
4 therewith;

5 placing the contents of the fragment packet descriptor ~~in a packet descriptor~~ in a
6 reassembly table associated with the packet; and

7 in response to receiving all the fragments for the packet, issuing a request to a re-
8 assembly assist function.

1 23. (Previously Presented) The method of claim 22, further comprising the step of:

2 determining if all fragments have been received.

- 1 24. (Currently Amended) ~~An apparatus~~ A network device for ~~reassembling~~ reassem-
2 bling a packet, comprising:
3 means for receiving a fragment packet having a fragment packet descriptor asso-
4 ciated therewith;
5 means for placing the contents of the fragment packet descriptor ~~in a packet de-~~
6 ~~scriptor~~ in a reassembly table associated with the packet; and
7 in response to receiving all the fragments for the packet, means for issuing a re-
8 quest to a reassembly assist function.
- 1 25. (Previously Presented) The apparatus of claim 24, further comprising:
2 means for determining if all fragments have been received.
- 1 26. (Currently Amended) A system for ~~reassembling~~ reassembling a packet, com-
2 prising:
3 a processor receives a fragment packet having a fragment packet descriptor asso-
4 ciated therewith;
5 a reassembly assist configured to communicate with the processor, the reassembly
6 assist adapted to locate the fragment packet descriptor associated with the packet;
7 the processor configured to store a reassembly table, the reassembly table storing
8 the contents of the fragment packet descriptor in a packet descriptor; and
9 in response to receiving all the fragments for the packet, the processor issues a re-
10 quest to a reassembly assist function.
- 1 27. (Previously Presented) The method of claim 26, further comprising the step of:
2 the reassembly assist determines if all fragments have been received.
- 1 28. (Cancelled)

- 1 29. (Currently Amended) A computer readable media, comprising:
2 said computer readable media having instructions written thereon for execution on
3 a processor for the practice of ~~reassembling~~ reassembling a packet, comprising,
4 receiving a fragment packet having a fragment packet descriptor associated
5 therewith;
6 placing the contents of the fragment packet descriptor ~~in a packet descriptor~~ in a
7 reassembly table associated with the packet; and
8 in response to receiving all the fragments for the packet, issuing a request to a re-
9 assembly assist function.

1 Please add new claim 30

1 30. (New) A method for reassembling a packet, the method comprising the steps of:
2 receiving a fragment packet having a fragment packet descriptor associated
3 therewith;
4 placing the contents of the fragment packet descriptor in a reassembly table asso-
5 ciated with the packet; and
6 in response to receiving all the fragments for the packet, issuing a request to a re-
7 assembly assist function; the reassembly function:
8 locating fragments in a fragment packet descriptor, and
9 reassembling the packet in response to a pointer in the reassembly table.